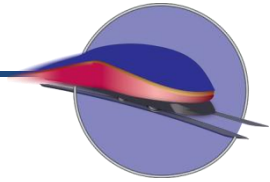


Corridor Program Name: CA-PHASE1HSRPROGRAM-PE/NEPA/CEQA Date of Submission: 10/01/09 Version Number: 1

High-Speed Intercity Passenger Rail (HSIPR) Program

Track 2–Corridor Programs:

Application Form



Welcome to the Application Form for Track 2–Corridor Programs of the Federal Railroad Administration’s High-Speed Intercity Passenger Rail (HSIPR) Program.

This form will provide information on a cohesive set of projects—representing a phase, geographic segment, or other logical grouping—that furthers a particular corridor service.

Definition: For purposes of this application, a “Corridor Program” is “a group of projects that collectively advance the entirety, or a ‘phase’ or ‘geographic section,’ of a corridor service development plan.” (*Guidance, 74 Fed. Reg. 29904, footnote 4*). A Corridor Program must have independent utility and measurable public benefits.

In addition to this application form and required supporting materials, applicants are required to submit a Corridor Service Overview.

An applicant may choose to represent its vision for the entire, fully-developed corridor service in one application or in multiple applications, provided that the set of improvements contained in each application submitted has independent utility and measurable public benefits. The same Service Development Plan may be submitted for multiple Track 2 Applications. Each Track 2 application will be evaluated independently with respect to related applications. Furthermore, FRA will make its evaluations and selections for Track 2 funding based on an entire application rather than on its component projects considered individually.

We appreciate your interest in the HSIPR Program and look forward to reviewing your entire application. If you have questions about the HSIPR program or the Application Form and Supporting Materials for Track 2, please contact us at HSIPR@dot.gov.

Instructions for the Track 2 Application Form:

- Please complete the HSIPR Application electronically. See Section G of this document for a complete list of the required application materials.
- In the space provided at the top of each section, please indicate the Corridor Program name, date of submission (mm/dd/yyyy), and an application version number assigned by the applicant. The Corridor Program name must be identical to the name listed in the Corridor Service Overview Master List of Related Applications. Consisting of less than 40 characters, the Corridor Program name must consist of the following elements, each separated by a hyphen: (1) the State abbreviation of the State submitting this application; (2) the route or corridor name that is the subject of the related Corridor Service Overview; and (3) a descriptor that will concisely identify the Corridor Program’s focus (e.g., HI-Fast Corridor-Main Stem).

- Section B, Question 10 requires a distinct name for each project under this Corridor Program. Please the following the naming convention: (1) the State abbreviation; (2) the route or corridor name that forms part of the Corridor Program name; and (3) a project descriptor that will concisely identify the project's focus (e.g., HI-Fast Corridor-Wide River Bridge). For projects previously submitted under another application, please use the **same name** previously used on the project application.
- For each question, enter the appropriate information in the designated gray box. If a question is not applicable to your Track 2 Corridor Program, please indicate "N/A."
- Narrative questions should be answered within the limitations indicated.
- Applicants must up load this completed and all other application materials to www.GrantSolutions.gov by October 2, 2009 at 11:59 pm EDT.
- Fiscal Year (FY) refers to the Federal Government's fiscal year (Oct. 1- Sept. 30).

Corridor Program Name: CA-PHASE1HSRPROGRAM-PE/NEPA/CEQA Date of Submission: 10/01/09 Version Number: 1

A. Point of Contact and Application Information

(1) Application Point of Contact (POC) Name: Mehdi Morshed		POC Title: Executive Director		
Applicant State Agency or Organization Name: California High-Speed Rail Authority				
Street Address: 925 L Street, Suite 1425	City: Sacramento	State: CA	Zip Code: 95814	Telephone Number: 916-324-1541
Email: mmorshed@hsr.ca.gov		Fax: 916-322-0827		

Corridor Program Name: CA-PHASE1HSRPROGRAM-PE/NEPA/CEQA Date of Submission: 10/01/09 Version Number: 1

B. Corridor Program Summary

(1) **Corridor Program Name:** CA-PHASE1HSRPROGRAM-PE/NEPA/CEQA

(2) **What are the anticipated start and end dates for the Corridor Program?** (mm/yyyy)

Start Date: 01/2007

End Date: 10/2012

(3) **Total Cost of the Corridor Program:** (Year of Expenditure (YOE) Dollars*) \$ 388.0 million

Of the total cost above,, how much would come from the FRA HSIPR Program: (YOE Dollars**) \$ 194.0 million

Indicate percentage of total cost to be covered by matching funds: 50%

Please indicate the source(s) for matching funds: State GO bonds

* Year-of-Expenditure (YOE) dollars are inflated from the base year. Applicants should include their proposed inflation assumptions (and methodology, if applicable) in the supporting documentation.

** This is the amount for which the Applicant is applying.

(4) **Corridor Program Narrative.** *Please limit response to 12,000 characters.*

Describe the main features and characteristics of the Corridor Program, including a description of:

- The location(s) of the Corridor Program's component projects including name of rail line(s), State(s), and relevant jurisdiction(s) (include a map in supporting documentation).
- How this Corridor Program fits into the service development plan including long-range system expansions and full realization of service benefits.
- Substantive activities of the Corridor Program (e.g., specific improvements intended).
- Service(s) that would benefit from the Corridor Program, the stations that would be served, and the State(s) where the service operates.
- Anticipated service design of the corridor or route with specific attention to any important changes that the Corridor Program would bring to the fleet plan, schedules, classes of service, fare policies, service quality standards, train and station amenities, etc.
- How the Corridor Program was identified through a planning process and how the Corridor Program is consistent with an overall plan for developing High-Speed Rail/Intercity Passenger Rail service, such as State rail plans or plans of local/regional MPOs.
- How the Corridor Program will fulfill a specific purpose and need in a cost-effective manner.
- The Corridor Program's independent utility.
- Any use of new or innovative technologies.
- Any use of railroad assets or rights-of-way, and potential use of public lands and property.
- Other rail services, such as commuter rail and freight rail that will make use of, or otherwise be affected by, the Corridor Program.
- Any PE/NEPA activities to be undertaken as part of the Corridor Program, including but not limited to: design studies and resulting program documents, the approach to agency and public involvement, permitting actions, and other key activities and objectives of this PE/NEPA work.

The California High-Speed Train system consists of new rail alignment, entirely within California, separated from road vehicle traffic and freight and conventional passenger trains, with a top design speed of 250 mph & operational speeds of up to 220 mph. Trains will be electrically-powered, steel-wheel-on-steel-rail, incorporating advanced train control & communications systems.. The system also

includes new stations, & facilities for operations control & maintenance of trains & right-of-way.

The new HST Phase 1 will operate almost exclusively on separated infrastructure over a 520-mile length. Starting at the San Francisco Transbay Terminal, it will share track with compatible Caltrain services to near 4th & King Streets in San Francisco and then in a shared-use corridor within the existing Caltrain ROW, on grade-separated trackage at-grade, elevated, or below grade (to be determined) and then to San Jose. A separate alignment parallel to existing transportation facilities will continue to south of Gilroy. A new alignment then turns east and crosses the coastal range in the vicinity of Pacheco Pass in a mix of at-grade, structures, and tunnel sections. New alignment alternatives across the Central Valley are being studied to reach a junction between Merced and Fresno with the line from Sacramento. In Phase 1, this line from the north will start at a new Merced station on separated new alignment generally at-grade, paralleling the UPRR and Route 99 corridors to the junction, then south to Fresno on aerial guideway structures. From Fresno to Bakersfield, the new alignment runs at-grade with some structures generally paralleling the BNSF and, in some areas possibly sharing ROW with BNSF, and aerial guideway structures in the urban area. The major heavy maintenance facility for the HST trains will be built along the line in the Central Valley. From Bakersfield, the line climbs the Tehachapi Pass in tunnels, on structures, and at grade, and continues on new alignment to Palmdale, then descends to Sylmar on a mix of structure, tunnel, & at-grade construction toward Burbank. From there, the line runs adjacent to the existing Metrolink corridor into a new section of the Los Angeles Union Station (LAUS). Running south through Redondo Junction, the alignment heads toward Anaheim on new structure in trench or tunnel and at-grade construction along the existing MTA and BNSF LOSSAN Corridor and terminates at separate platforms at the Anaheim Regional Transportation Intermodal Center (ARTIC). (See map in Supporting Documents.)

Phase 1 CEQA/NEPA work will consider the following stations:

San Francisco (Transbay Terminal, potentially 4th & King for some service)
 Millbrae
 Redwood City or Palo Alto
 San Jose Diridon Station
 Gilroy or Morgan Hill
 Merced
 Fresno
 Potentially Visalia/Hanford
 Bakersfield
 Palmdale or Lancaster
 Sylmar or Santa Clarita
 Burbank
 LAUS
 Norwalk or Fullerton
 ARTIC

Phase 2 will add extensions north to Sacramento and south to San Diego. From new station facilities in downtown Sacramento, the line will parallel the existing UP rail freight corridor, and then generally parallel existing transportation facilities to Merced. From Redondo Junction, the new line to San Diego will parallel existing transportation facilities east to Ontario, then toward Riverside, turning south to Temecula, Murrieta, and into urban San Diego. The resulting Full System stations to be reviewed in a related CEQA/NEPA application will consider stations in:

Sacramento
 Stockton
 Modesto
 City of Industry
 Ontario
 Riverside or Corona or San Bernardino
 Murrieta
 Escondido
 University City
 San Diego (downtown Santa Fe or new Lindbergh intermodal facility)

The HST system will operate over 200 trains per day by 2035, carrying up to 100 million passengers statewide. Major benefits for mobility, economic activity, air quality, and land use development are documented in the 2005 CAHST Statewide Program EIS/EIR and the 2008 Bay Area to Central Valley Program EIS/EIR. Schedules, up to five times faster than current rail services, would be competitive with air in many of the major markets. The fare structure will be California-specific & may include different fares

depending on class of service, and reflect time of day, week, and seasonal peaks, as well as time in advance of booking. In general, fares will be higher than current rail and bus fares and driving cost, reflecting value in time saved, but not higher than air fares. Service quality will be a major improvement over current modes, with near 100% on-time performance, smooth comfortable rides, and the highest safety of any mode of travel, as shown by nearly 50 years of fatality-free high-speed rail transportation in Japan. Station amenities will be appropriate for the various user markets.

The Phase 1 preliminary engineering and environmental work will create 3,400 jobs, increasing to 480,000 jobs during final design & construction of Phase 1, and many more when operations begin. Many created jobs will be in Economically Distressed Areas. (See Section D2.)

Environmental benefits (see Section D3) will be gained from diverting air and auto passengers to the electrified HST.

In addition, existing commuter, Amtrak, and freight rail services will benefit from grade separations, fencing and other safety improvements where services closely parallel HST alignment. Amtrak, commuter rail, and other transit services will see growth in traffic where HST travelers use them to get to and/or from their final destinations. The potential exists for passenger rail operators to benefit from the infrastructure investment by buying compatible trainsets and operating express local service at faster speeds, and commanding higher prices, however, no such agreements have been reached. To the extent that service shifts to the CHST alignment are realized, freight capacity for UP and BNSF will be increased.

Formal planning of the HST has been a continuous process of over a decade. Following national and international project implementation attempts in the 1980's, several state studies and a temporary commission, a permanent state agency – the High-Speed Rail Authority – was established in 1996 to move high-speed rail forward. The Authority conducted a state-wide planning effort, bringing in local/regional MPOs, cities, and other interested parties, then a formal EIS/EIR process, with the FRA as federal lead agency and with state appropriations paying the cost of developing the Statewide Programmatic EIS/EIR Federal Record of Decision and State Notice of Determination issued in 2005. The subsequent Bay Area–Central Valley Programmatic EIS/EIR was finished in July 2008. The current project-level EIS/EIR work, for which funding is being requested in this application, is the final step in the planning process before construction can begin.

The California HST Corridor Program is included in the State Long Range Transportation Improvement Plan and the State Rail Plan, as well as in MPO plans for the Bay Area MTC, SACOG, Central Valley, SCAG, SANBAG, and SANDAG.

The HST cost-effectively meets identified purpose and need (a) to provide a reliable high-speed electrified train system that links the major Bay Area cities to the Central Valley, Sacramento, and Southern California, and that delivers predictable and consistent travel times, and (b) that the state's intercity transportation system is insufficient to meet existing and future demand.

High-speed trains will alleviate the need to build—at a cost of nearly \$100 billion—about 3,000 freeway miles, five airport runways and 90 departure gates over the next two decades, each with significant environmental and social challenges. A statewide HST system—already subjected to environmental review—will meet that need at about half the cost. Significantly, the CHST project has the support of major California airport operators, including Los Angeles, San Francisco and San Diego international airports.

The ongoing operations will also be cost-effective, providing a cash flow that will help offset a portion of the original capital cost, and will not require an operating subsidy.

Independent utility will be achieved in Phase 1. As shown by the significant use forecast and the positive cash flow from Phase 1, the HST Corridor Program will provide independent utility before the Full System is complete. (See Financial Plan in Supporting Documents.)

The California HST will use technologies that are decidedly innovative for US passenger rail network, although proven in high-speed rail passenger service around the globe. These include full grade separation, trainsets, control systems, other core system elements, structure design and construction practices, intrusion and hazards detection, operations rules, and preventive maintenance practices that provide the highest level of safety assurance, and, and allow safe operations at speeds today of 320 kph, and planned operations at 350 kph (220 mph).

Use of railroad properties is mostly limited to areas where there is opportunity to share corridors and rights-of-way. In each case, the Authority will reach agreement with the private or public railroad or asset owner, and with the sole exception of the entry into the Transbay Terminal in San Francisco, will not involve operation on tracks used by existing operating railroads. Areas where there is

likely agreement on such use of railroad property include the Caltrain corridor from San Francisco to San Jose, the LOSSAN corridor from Los Angeles to Anaheim, grade-separated structures crossing rail lines, spurs or other property along the entire line, and longitudinal use of portions of freight rail right-of-way between Fresno and Bakersfield. The use of public lands is similarly incidental, generally limited to grade-separated crossings of public roads and highways and the use of rail facilities designed for the HST such as stations (ARTIC, LAUS, Transbay, San Jose Diridon). Agreements will be reached with each public owner on terms and conditions of use.

The Authority and FRA, as lead agencies, are performing the PE/NEPA/CEQA activities, which will take Phase 1 to bid documents.

This Phase 1 Corridor Program request includes funding for completion of the project-level PE/NEPA/CEQA activities, in full compliance with NEPA/CEQA requirements, expected to result in a series of RODs and NODs between March 2011 & October 2012, and completion of 30% preliminary engineering to allow the issuance of tender and bid documents. The four earliest sections (SF-San Jose, Merced-Fresno, Fresno-Bakersfield, LA-Anaheim) are scheduled to obtain RODs and NODs by September 30, 2011.

The Authority is poised for and capable of managing construction and operations.

The California HST System will be built with a mix of state, federal, private, and local funds, under the direction of the Authority, a state agency. The state will acquire and own the right-of-way, using its eminent domain power as needed, and the infrastructure and systems will be built and installed in a series of competitively tendered design-build packages, some of which may include maintenance and/or operations. The Authority, with its management team of experienced high-speed rail planning, engineering, and construction management consultant firms, has the organizational structure and the capacity to move Phase 1 of the California HST System through the project-level environmental work and preliminary engineering to construction and operations.

(5) Describe the service objective(s) for this Corridor Program (check all that apply):

- | | |
|---|---|
| <input type="checkbox"/> Additional Service Frequencies | <input type="checkbox"/> Increased Average Speeds/Shorter Trip Times |
| <input type="checkbox"/> Improved Service Quality | <input type="checkbox"/> New Service on Existing IPR Route |
| <input type="checkbox"/> Improved On-Time performance on Existing Route | <input checked="" type="checkbox"/> New Service on New Route |
| <input type="checkbox"/> Reroute Existing Service | <input checked="" type="checkbox"/> Other (Please Describe): HST on fully-grade separated dedicated tracks designed for up to 250-mph standards |

(6) Right-of-Way-Ownership. Provide information for all railroad right-of-way owners in the Corridor Program area. Where railroads currently share ownership, identify the primary owner. *If more than three owners, please detail in Section F of this application.*

Type of Railroad	Railroad Right-of-Way Owner	Route Miles	Track Miles	Status of agreements to implement projects
Class 1 Freight	Various, See Section F			Host Railroad Consulted, but Support not
Commuter Rail	Various, See Section F			Preliminary Executed Agreement/MOU
Class 1 Freight				Master Agreement in Place

(7) Services. Provide information for all existing rail services within Corridor Program boundaries (freight, commuter, and intercity passenger). *If more than three services, please detail in Section F of this application.*

Type of Service	Name of Operator	Top Speed Within Boundaries	Number of Route Miles	Average Number of Daily	Notes
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		Passenger	Freight	Within Boundaries	One-Way Train Operations within Boundaries ¹	
Freight	Various	Varies	Varies	See Section F	See Section F	See Section F
Commuter	Various	Varies	Varies	See Section F	See Section F	See Section F
Intercity Passenger	Various	Varies	Varies	See Section F	See Section F	See Section F
<p>(8) Rolling Stock Type. Describe the fleet of locomotives, cars, self-powered cars, and/or trainsets that would be intended to provide the service upon completion of the Corridor Program. <i>Please limit response to 2,000 characters.</i></p> <p>The Authority has selected steel-wheel-on-steel-rail technology for the California High-Speed Train System. This technology, proven in high-speed operations throughout the world, maximizes competition during procurement. Subject to FRA review during the Rule of Particular Applicability evaluation process (see Section E. Item 1C), preliminary performance criteria include:</p> <p>Type of Vehicle: Distributed Power Electric Multiple Unit. Quantity: Approximately one hundred, 660-foot length trainsets subject to final ridership analysis. Consist: 660-foot or coupled to make a 1320-foot trainset. Maximum Speed: 220 mph; within urban areas, high-speed trains will likely travel at maximum speeds between 110 and 125 mph. Passenger Capacity: Depending on final seating configuration, 900-1,000 passengers in a 1320-foot trainset.</p>						
<p>(9) Intercity Passenger Rail Operator. If applicable, provide the status of agreements with partners that will operate the benefiting high-speed rail/intercity passenger rail service(s) (e.g., Amtrak). If more than one operating partner is envisioned, please describe in Section F.</p> <p>Name of Operating Partner: Unknown</p> <p>Status of Agreement: Operations being competitively bid</p>						

¹ One round trip equals two one-way train operations.

(10) Master Project List. Please list all projects included in this Track 2 Corridor Program application in the table below. If available, include more detailed project costs for each project as a supporting form (see Section G below).

Project Name	Project Type	Project Description	Project Start Date (mm/yyyy)	Estimated Project Cost (Millions of YOE Dollars, One Decimal)		Was this Project included in a prior HSIPR application? Indicate track number(s).	Are more detailed project costs included in the Supporting Forms?
				Total Cost	Amount Applied For		
SF-SAN JOSE HSR PE/NEPA/CEQA	PE/ NEPA	Complete NEPA/CEQA and Preliminary Engineering	01/2007	61.0	30.5	No	Yes
SAN JOSE-MERCED HSR PE/NEPA/CEQA	PE/ NEPA	Complete NEPA/CEQA and Preliminary Engineering	01/2007	60.0	30.0	No	Yes
MERCED-FRESNO HSR PE/NEPA/CEQA	PE/ NEPA	Complete NEPA/CEQA and Preliminary Engineering	01/2007	42.0	21.0	No	Yes
FRESNO-BAKERSFIELD HSR PE/NEPA/CEQA	PE/ NEPA	Complete NEPA/CEQA and Preliminary Engineering	01/2007	75.0	37.5	No	Yes
BAKERSFIELD-PALMDALE HSR PE/NEPA/CEQA	PE/ NEPA	Complete NEPA/CEQA and Preliminary Engineering	01/2007	40.0	20.0	No	Yes
PALMDALE-LA HSR PE/NEPA/CEQA	PE/ NEPA	Complete NEPA/CEQA and Preliminary Engineering	01/2007	80.0	40.0	No	Yes
LA-ANAHEIM HSR PE/NEPA/CEQA	PE/ NEPA	Complete NEPA/CEQA and Preliminary Engineering	01/2007	30.0	15.0	No	Yes
	PE/ NEPA						Yes
	PE/ NEPA						Yes
	PE/ NEPA						Yes
	PE/ NEPA						Yes
	PE/ NEPA						Yes
	PE/ NEPA						Yes
	PE/ NEPA						Yes
	PE/ NEPA						Yes
	PE/ NEPA						Yes
	PE/ NEPA						Yes
	PE/ NEPA						Yes
	PE/ NEPA						Yes
	PE/ NEPA						Yes
	PE/ NEPA						Yes
	PE/ NEPA						Yes
	PE/ NEPA						Yes
	PE/ NEPA						Yes

Note: In addition to **program** level supporting documentation, all applicable **project** level supporting documentation is required prior to award. If project level documentation is available now, you may submit it; however, if it is not provided in this application, this project may be considered as a part of a possible Letter of Intent but will not be considered for FD/Construction grant award until this documentation has been submitted.

In narrative form, please describe the sequencing of the projects listed in Question 10. Which activities must be pursued sequentially, which can be done at any time, and which can be done simultaneously? Please limit response to 4,000 characters.

Phase 1 NEPA/CEQA Environmental Reviews

This Corridor Program is broken down into seven separate projects. All seven are being carried out concurrently and are all currently underway.

The LA-Anaheim, SF-San Jose, Merced-Fresno, and Fresno-Bakersfield EIS/EIRs are expected to be completed by September 30, 2011 along with 30% Preliminary Engineering and camera-ready design-build bidding documents. These four Corridor Programs would be the first to be built.

The other three Phase 1 sections (San Jose-Merced, Bakersfield-Palmdale and Palmdale-LA) EIS/EIRs are expected to be complete by September 30, 2012 and would be bid by 2013.

Corridor Program Name: CA-PHASE1HSRPROGRAM-PE/NEPA/CEQA Date of Submission: 10/01/09 Version Number: 1

C. Eligibility Information

(1) Select applicant type, as defined in Appendix 1.1 of the HSIPR Guidance:

- ☒ State
☐ Amtrak

If one of the following, please append appropriate documentation as described in Section 4.3.1 of the HSIPR Guidance:

- ☐ Group of States
☐ Interstate Compact
☐ Public Agency established by one or more States
☐ Amtrak in cooperation with a State or States

(2) Establish completion of all elements of a Service Development Plan. Note: One Service Development Plan may be referenced in multiple Track 2 Applications for the same corridor service.

Please provide information on the status of the below Service and Implementation Planning Activities:

	Select <u>One</u> of the Following:			Provide Dates for all activities:	
	No study exists	Study Initiated	Study Completed	Start Date (mm/yyyy)	Actual or Anticipated Completion Date (mm/yyyy)
Service Planning Activities/Documents					
Purpose & Need/Rationale	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		8/2005
Service/Operating Plan	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		8/2005
Prioritized Capital Plan	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		8/2005
Ridership/Revenue Forecast	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		8/2005
Operating Cost Forecast	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		8/2005
Assessment of Benefits	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		8/2005
Implementation Planning Activities/Documents					
Program Management Plan	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		6/2009
Financial Plan (capital & operating – sources/uses)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		11/2008
Assessment of Risks	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		11/2008

(3) Establish Completion of Service NEPA Documentation (the date document was issued and how documentation can be verified by FRA). The following are approved methods of NEPA verification (in order of FRA preference): 1) References to large EISs and EAs that FRA has previously issued, 2) Web link if NEPA document is posted to a website (including www.fra.gov), 3) Electronic copy of non-FRA documents attached with supporting documentation, or 4) a hard copy of non-FRA documents (large documents should not be scanned but should be submitted to FRA via an express delivery service). See HSIPR Guidance Section 1.6 and Appendix 3.2.9.

Note to applicants: Prior to obligation of funds for FD/Construction activities under Track 2, all project specific documents will be required (e.g. Project NEPA, Financial Plan, and Project Management Plan).

Documentation	Date (mm/yyyy)	Describe How Documentation Can be Verified
Tier 1 NEPA EIS (Programmatic)	08/2005	http://www.cahighspeedrail.ca.gov/library/Default.aspx?ItemID=5834
Tier 1 NEPA EIS (Programmatic)	05/2008	http://www.cahighspeedrail.ca.gov/library/default.aspx
Tier 1 NEPA EA	na	
(4) Indicate if there is an environmental decision from FRA (date document was issued and web hyperlink if available)		
Documentation	Date (mm/yyyy)	Hyperlink (if available)
Record of Decision	11/2005	http://www.cahighspeedrail.ca.gov/library/Default.aspx?ItemID=5834
Record of Decision	12/2008	http://www.cahighspeedrail.ca.gov/library/default.aspx
Finding of No Significant Impact	na	

Corridor Program Name: CA-PHASE1HSRPROGRAM-PE/NEPA/CEQA Date of Submission: 10/01/09 Version Number: 1

D. Public Return on Investment

(1) 1A. Transportation Benefits. See HSIPR Guidance Section 5.1.1.1. Please limit response to 8,000 characters.

How is the Corridor Program anticipated to improve Intercity Passenger Rail (IPR) service? Describe the overall transportation benefits, including information on the following (*please provide a level of detail appropriate to the type of investment*):

- Introduction of new IPR service: Will the Corridor Program lead directly to the introduction of a new IPR service that is not comparable to the existing service (if any) on the corridor in question? Describe the new service and what would make it a significant step forward in intercity transportation.
- IPR network development: Describe projected, planned, and potential improvements and/or expansions of the IPR network that may result from the Corridor Program, including but not limited to: better intermodal connections and access to stations; opportunities for interoperability with other services; standardization of operations, equipment, and signaling; and the use of innovative technologies.
- IPR service performance improvements (*also provide specific metrics in table 1B below*): Please describe service performance improvements directly related to the Corridor Program, as well as a comparison with any existing comparable service. Describe relevant reliability improvements (e.g., increases in on-time performance, reduction in operating delays), reduced schedule trip times, increases in frequencies, aggregate travel time savings (resulting from reductions to both schedule time and delays, e.g., expressed in passenger-minutes), and other relevant performance improvements.
- Suggested supplementary information (*only when applicable*):
 - Transportation Safety: Describe overall safety improvements that are anticipated to result from the Corridor Program, including railroad and highway-rail grade crossing safety benefits, and benefits resulting from the shifting of travel from other modes to IPR service.
 - Cross-modal benefits from the Corridor Program, including benefits to:
 - ✓ Commuter Rail Services – Service improvements and results (applying the same approach as for IPR above).
 - ✓ Freight Rail Services – Service performance improvements (e.g., increases in reliability and capacity), results (e.g. increases in ton-miles or car-miles of the benefiting freight services), and/or other congestion, capacity or safety benefits.
 - ✓ Congestion Reduction/Alleviation in Other Modes; Delay or Avoidance of Planned Investments – Describe any expected aviation and highway congestion reduction/alleviation, and/or other capacity or safety benefits. Also, describe any planned investments in other modes of transportation (and their estimated costs if available) that may be avoided or delayed due to the improvement to IPR service that will result from the Corridor Program.

The California HST Phase 1 System Corridor Program will be part of a new intercity passenger rail (IPR) service not provided today, with over 200 trains per day in 2035, carrying up to 100 million passengers statewide. Of these, approximately 50 million will be carried in Phase 1. Major benefits for mobility, economic activity, air quality, and land use development will be created, as documented in the 2005 California HST Statewide Program EIS/EIR and the 2008 Bay Area to Central Valley Program EIS/EIR.

The California HST Full System will build nearly 800 miles of new rail infrastructure separated from vehicular road traffic and conventional freight and passenger trains, allowing operations at up to 220 mph of state-of-the-art, electrically powered, high-speed, steel-wheel-on-steel-rail technology, including state-of-the-art train control and communications systems. Safety and reliability of intercity passenger service in California will be significantly improved.

The California HST itself will be the primary expansion of intercity passenger rail service by:

- creating direct through IPR service from San Diego, Orange County, Riverside, and Los Angeles counties to the Central Valley, Sacramento, and the Bay Area extending the network from Los Angeles to San Diego by way of the Inland Empire
- extending the IPR network up the San Francisco Peninsula to serve San Mateo and San Francisco counties
- Providing vastly improved travel times/capacity/frequency of service.

The California HST will also reinforce and improve elements of the existing IPR service. These include:

- providing an overlay of express high-speed IPR service along the route of the existing San Joaquin services from Bakersfield to Sacramento
- providing an overlay of express high-speed IPR service from Anaheim to Burbank along the route of existing Surfliner services
- expanding passenger demand at existing IPR stations, creating the base for expanded intermodal opportunities, including rail and bus transit, shuttle, and taxi services, (Anaheim, Norwalk/Fullerton, Los Angeles Union Station, Burbank, Bakersfield, Fresno, Merced, Modesto, Stockton, Sacramento, and San Jose).

The California HST will provide on-time performance of nearly 100% (arrival at end point stations within 10 minutes, standard applied to Acela, regardless of distance) based on experience with European and Japanese operations that are completely grade-separated and on new infrastructure, as will be the case with the California HST. The intermediate point punctuality will be very high as well, with delays per 10,000 train miles estimated at under 66 minutes, equivalent to a cumulative 3-minute delay from scheduled arrivals at all intermediate points on a Los Angeles – San Francisco run and less than the normal schedule allowance for end point arrival. These are major improvements over existing IPR service in the US, where the Acela is 90% on time and the Northeast Corridor, the best ranked host railroad, experiences over 600 minutes in train delay per 10,000 train miles.

The California HST will decrease the cost and time of travel for all markets served. For the 75% of passengers attracted from driving, the California HST will save half or more of the trip time; in the example of the LA Basin to San Joaquin Valley market, the 8.3 million yearly riders, nearly all drawn from auto, will save over 1 billion minutes of travel time. And the 2005\$ cost of the HST trip in this market of around \$40 is also below the driving cost of around \$50, saving around \$80 million per year.

The most telling indicator of the extent to which the California HST will improve IPR service is that the forecast passenger revenues will exceed the operating and maintenance costs, as is the case in high-speed services around the world, including the Acela service, which in May 2009 generated a surplus of \$52 million in revenue over fully allocated O&M costs excluding depreciation and interest. The forecast surplus in 2035 for the Full System is over \$2 billion (2008\$).

In the year 2030, the full California HST will create an estimated \$11 billion in direct benefits to its riders, to drivers and air passengers who experience less congestion, and to the state as a whole in pollution reduction and accident reduction. In five years of operation, the benefits will exceed the cost of building the line and operating it. In economist's terms, California will realize \$150 billion in present value of net benefits by 2050—nearly triple the total present value of the cost of the project. Not only will high-speed train passengers benefit from the system, more than a third of the benefits will be accrued by air and auto travelers in the form of reduced delays, reduced air pollution, and reduced auto accidents and fatalities. Table 1 below, from Business Plan 2008 Source Document, Benefit-Cost Analysis, Cambridge Systematics, summarizes the cost / benefit results by category and mode where appropriate.

Table 1 Summary of Benefit-Cost Analysis Results

Benefits

Passenger Revenue	\$33,718,000,000
User Benefits	
Intercity	\$55,210,000,000
Urban	\$1,542,000,000
Non-User Benefits	
Intercity	
Airline Passenger Delay	\$1,969,000,000
Aircraft Operator Delay	\$1,750,000,000
Highway Delay	\$27,081,000,000
Highway Accident	\$12,211,000,000
Highway Air Pollution	\$1,611,000,000
Urban	
Highway Delay	\$15,385,000,000
Highway Accident	included in intercity
Highway Air Pollution	included in intercity
Total Benefits	\$150,478,000,000
Costs	
Capital	\$33,993,000,000
Operations & Maintenance	\$19,065,000,000
Total Costs	\$53,058,000,000
Benefit-Cost Ratio	2.84
Net Present Value	\$97,420,000,000
Internal Rate of Return	8.8%

Note: All monetary values are in 2008 dollars, with future monetary values discounted at 4 percent.

Source: Cambridge Systematics, September 2008.

The reductions in highway congestion and accidents from shifting traffic from auto to the HST described above will be augmented by the separation or closure of existing road crossings of active railroad lines as part of the HST construction. Locally these improvements may be important, and their impacts are to be quantified in the EIS/EIR work.

As documented in the 2005 Statewide Program EIR/EIS, Chapter 3, to serve the same number of travelers as the high-speed train system, California would have to build nearly 3,000 lane-miles of freeway plus five airport runways and 90 departure gates by 2020 – costing more than twice the high-speed train system and having much greater environmental impacts.

1B. Operational and Ridership Benefits Metrics: In the table(s) below, provide information on the anticipated levels of transportation benefits and ridership that are projected to occur in the corridor service or route, following completion of the proposed Corridor Program.

Note: The “Actual—FY 2008 levels” only apply to rail services that currently exist. If no comparable rail service exists, leave column blank.

Corridor Program Metric	Actual – FY 2008 levels	Projected Totals by Year		
		First full year of operation	Fifth full year of operation	Tenth full year of operation
Annual passenger-trips	n.a.	28 million	50 million	93 million
Annual passenger-miles (millions)	n.a.	8,400	15,100	24,000
Annual IPR seat-miles offered (millions)	n.a.	16,590	21,530	28,350
Average number of daily <u>round trip</u> train operations (typical weekday)	n.a.	71	123	116
On-time performance (OTP) ² — percent of trains on time at endpoint terminals	n.a.	~99%	~99%	~99%
Average train operating delays: minutes of en-route delays per 10,000 train-miles ³	n.a.	66	66	66
Top passenger train operating speed (mph)	n.a.	220	220	220
Average scheduled operating speed (mph) (between endpoint terminals)	n.a.	157.6	157.6	154.8

² ‘On-time’ is defined as within the distance-based thresholds originally issued by the Interstate Commerce Commission, which are: 0 to 250 miles and all Acela trains—10 minutes; 251 to 350 miles—15 minutes; 351 to 450 miles—20 minutes; 451 to 550 miles—25 minutes; and 551 or more miles—30 minutes.

³ As calculated by Amtrak according to its existing procedures and definitions. Useful background (but not the exact measure cited on a route-by-route basis) can be found at pages E-1 through E-6 of Amtrak’s May 2009 Monthly Performance Report at <http://www.amtrak.com/pdf/0905monthly.pdf>

(2) A. Economic Recovery Benefits: *Please limit response to 6,000 characters. For more information, see Section 5.1.1.2 of the HSIPR Guidance.*

Describe the contribution the Corridor Program is intended to make towards economic recovery and reinvestment, including information on the following:

- How the Corridor Program will result in the creation and preservation of jobs, including number of onsite and other direct jobs (on a 2,080 work-hour per year, full-time equivalent basis), and timeline for achieving the anticipated job creation.
- How the different phases of the Corridor Program will affect job creation (consider the construction period and operating period).
- How the Corridor Program will create or preserve jobs or new or expanded business opportunities for populations in Economically Distressed Areas (consider the construction period and operating period).
- How the Corridor Program will result in increases in efficiency by promoting technological advances.
- How the Corridor Program represents an investment that will generate long-term economic benefits (including the timeline for achieving economic benefits and describe how the Corridor Program was identified as a solution to a wider economic challenge).
- If applicable, how the Corridor Program will help to avoid reductions in State-provided essential services.

The Phase 1 System PE / NEPA / CEQA program to complete 30% engineering and move its projects to a ROD and NOD will cost \$388 million. This will create and maintain 3,400 full time equivalent jobs in engineering, environmental planning, and related fields, based on the average cost per FTE of the Authority's engineering and environmental planning contracts during California's FY 08/09. These jobs will be spread over 3 years, with an average of 1,124 jobs in each year.

Many of these direct jobs will be located at offices in counties that are deemed Economically Distressed Areas (EDAs), i.e. those counties which have had 24 sequential months of unemployment 1% or more higher than the national average, or in which the per capita income is 80% or less than the national average based on end of year 2008 data. The EDAs that will benefit directly from these jobs and their July 2009 unemployment rates are the counties of Fresno (15%), Los Angeles (12.5%), and Sacramento (12%). The bulk of the rest of the jobs are also in counties with high current unemployment rates including Alameda (11.5%), Contra Costa (11%), Orange (9.5%), Riverside (14.7%), San Diego (10.3%), San Francisco (9.9%), Santa Clara (11.7%) and Yolo (11.2%).

The direct jobs will also create secondary economic activity and create/maintain an additional 4-6,000 jobs in these and surrounding counties over the three year period.

The Phase 1 System PE/NEPA/CEQA program is a vital step in increasing long term economic activity in California, by clearing the way for the construction and operation of the California HST system. Design, construction, and management of the Phase 1 System will result in an addition of 600,000 total jobs, of which 160,000 direct design/construction/management jobs, and 190,000 jobs in those associated with supply of materials and services to construction, and the remainder from the follow-on secondary economic activity.

Operation of Phase 1 System service will create a strong economic stimulus from the improvements in transportation efficiency. Scaling from the estimates in the 2005 Statewide Program EIS/EIR (see Chapter 5) of an additional 450,000 jobs in year 2035 from the Full System's operation, Phase 1 System operations could provide half to 2/3 of that jobs stimulus or 225,000 to 300,000 permanent jobs by 2035. Around 4,000 of them would be from the operation and maintenance of the high-speed train itself, a smaller number of jobs would be created in the supply and service industry, and the great majority of new jobs would be in the broader economy.

Much of the new job creation will occur in California's EDAs. In addition to the EDAs listed earlier, construction of the line and facilities, and operations and maintenance will create jobs in the Central Valley, historically less economically developed than the rest of the state, and the location of the planned heavy maintenance facility which will have around 1,000 employees, a large proportion of them skilled mechanical and electrical equipment personnel. In particular the EDAs of Kings, Kerns, Madera, Merced, San Joaquin, Stanislaus, & Tulare, all with July 2009 unemployment of 13.9% or more, will attract a disproportionate share of the benefits as access improves from the HST operation.

2B. Job Creation. Provide the following information about job creation through the life of the Corridor Program. Please consider construction, maintenance and operations jobs.

	FD/ Construction Period	First full year of operation	Fifth full year of operation	Tenth full year of operation
Anticipated number of onsite and other direct jobs created (on a 2080 work-hour per year, full-time equivalent basis).	5,500	3,000 (4,000 Phase 1 2030 reduced 0.75% p.a. to 2020 and to 80% for 1st year of operation)	3,850 (Phase 1 reduced 1.5% p.a. to 2025)	6,000 (Full system 2030)

(3) Environmental Benefits. Please limit response to 6,000 characters.

How will the Corridor Program improve environmental quality, energy efficiency, and reduce in the Nation's dependence on oil? Address the following:

- Any projected reductions in key emissions (CO₂, O₃, CO, PM_x, and NO_x) and their anticipated effects. Provide any available forecasts of emission reductions from a baseline of existing travel demand distribution by mode, for the first, fifth, and tenth years of full operation (*provide supporting documentation if available*).
- Any expected energy and oil savings from traffic diversion from other modes and changes in the sources of energy for transportation. Provide any available information on changes from the baseline of the existing travel demand distribution by mode, for the first, fifth, and tenth years of full operation (*provide supporting documentation if available*).
- Use of green methods and technologies. Address green building design, "Leadership in Environmental and Energy Design" building design standards, green manufacturing methods, energy efficient rail equipment, and/or other environmentally-friendly approaches.

The Full System high-speed train program will reduce oil consumption by 12.7 million barrels of oil per year in 2030. As documented in the Bay Area – Central Valley Program EIS/EIR, this is the savings from diverting air and auto passengers to the electrified HST, which is anticipated to be powered entirely from renewable sources. The California High-Speed Rail Authority Board has adopted the goal of relying on renewables, and the industry is expected to develop sufficient capacity and reliability to provide power from renewables to the HST service at a relatively small premium to fossil fuel sourced power. (See Navigant Consulting, "The Use of Renewable Energy Sources to Provide Power to California's High Speed Rail", May 2008 on www.cahighspeedrail.gov).

If Phase 1 were still the only portion of the system operating in the year 2030, oil consumption savings would be roughly 8.9 million barrels (bbls), proportional to the HST passenger miles carried, or 70% of the 21.8 billion passenger miles of the Full System.

Scaled to the expected traffic levels of the HST system as it opens, savings of oil will be:

First full year of operation:	4.5 million bbls	(Phase 1, 2020)
Fifth year:	8.0 million bbls	(Phase 1, 2025)
Tenth year	12.7 million bbls	(Full System, 2030)

The same shift of travelers from air & auto to the HST & reductions in fossil fuel consumption will reduce greenhouse gas & other pollutant emissions in the year 2030, the tenth year of assumed operation. CO₂ reductions of 12 billion pounds in 2030 air & auto emissions are documented in the EIR/S from the HST Full System operation. Additionally reductions in carbon monoxide (35 tons/day), particulate matter (2.5 & 10 micron) (4 tons/day), NO_x (9 tons/day) and total organic compounds (5 tons/day) are shown in the EIS/EIR, generating benefits rated at "medium", equivalent to several percent of the State's total inventory, even if the HST electricity needs were generated with a substantial amount of fossil fuel. The reductions would be 35% of these amounts in the first full year of operations, and in the fifth year 60%.

If Phase 1 were still the only portion of the system operating in the year 2030, CO₂ emissions would be reduced by 8.4 billion pound annually, and the other emissions reductions would also be roughly 70% of those with the Full System.

(4) Livable Communities Corridor Program Benefits Narrative. *(For more information, see Section 5.1.1.3 of the HSIPR Guidance, Livable Communities). Please limit response to 3,000 characters.*

How will the Corridor Program foster Livable Communities? Address the following:

- Integration with existing high density, livable development: Provide specific examples, such as (a) central business districts with walking/biking and (b) public transportation distribution networks with transit-oriented development.
- Development of intermodal stations: Describe such features as direct transfers to other modes (both intercity passenger transport and local transit).

As part of its environmental sustainability program, the Authority has made a commitment to build its high-speed train system in a way that encourages higher density development around its stations so that it is successfully integrated and woven into the surrounding urban landscape. While actual land use decisions will be made by local communities and the real estate market, the Authority will utilize its resources, both financial and otherwise, to encourage development patterns around its stations to include: higher density development in relationship to the existing pattern of development in the surrounding area; a mix of land uses (e.g., retail, office, entertainment, residential); a street pattern and design that promotes walking, bicycling and transit access; the use of context sensitive building design that considers the continuity of building sizes and architectural detailing; and limits on the amount of parking for new development and a preference that station parking be placed in structures.

Most of the stations will serve as multi-modal transportation hubs and be located in downtown areas, either within the central business district or in a nearby location. Successful transit systems share one common trait—excellent pedestrian access. Since transit works best when stations and shops are easily accessible and surrounded by places that people like to visit, the Authority will work with local communities to establish strong, well defined pedestrian and bicycle linkages to downtown areas and other public transit. This will help increase the number of transit patrons and the overall vitality of the surrounding community.

All of the high-speed rail stations will provide access to local bus services and many of the stations will also provide access to local, commuter, and intercity rail services. Since transit system connectivity is important for encouraging ridership, the high-speed stations will include such features as kiosks with transit schedules and fare information, way-finding signage, and the use of real-time technology with train arrival and departure information. These elements are all designed to promote a convenient and “seamless” transit system by reducing travel times, providing more reliable connections, and making it easier to pay so that transfers from the high-speed rail system to other transit modes can occur as safely and easily as possible.

Corridor Program Name: CA-PHASE1HSRPROGRAM-PE/NEPA/CEQA Date of Submission: 10/01/09 Version Number: 1

E. Application Success Factors

(1) Project Management Approach and Applicant Qualifications Narrative. *Please provide separate responses to each of the following. Additional information on program management is provided in Section 5.1.2.1 of the HSIPR Guidance, Project Management.*

1A. Applicant qualifications.

Management experience: Does the applicant have experience in managing rail investments and Corridor Programs of a similar size and scope to the one proposed in this application?

- ☒ Yes - Briefly describe experience (brief project(s) overview, dates)
☐ No- Briefly describe expected plan to build technical and managerial capacity. Provide reference to Project Management Plan.

Please limit response to 3,000 characters.

Mehdi Morshed, Executive Director (1998-present)

With 34 years of experience in transportation, Morshed has advanced the CHSTP from a conceptual proposal through program-level environmental clearance and now toward construction. For more than 20 years, he served as principal policy consultant on transportation issues for the California Senate. He helped guide creation of the state's primary transportation institutions, such as the California Transportation Commission, various local and regional commissions, districts and agencies, as well as the High-Speed Rail Authority, where he served on the board prior to becoming Executive Director.

Anthony Daniels, Program Director (2006-present)

Daniels leads the Program Management Team, bringing more than 40 years of HST project management experience. Projects include: Managing Operation of UK West Midlands High-Speed Rail Corridors; Upgrading of UK West Coast Main Line; Design of LA to San Diego High-Speed (with Amtrak & Japanese rail companies); the 3C Ohio project; Florida High-Speed FOX project (with French rail companies as franchisee); Texas Triangle (with MK & Bombardier as franchisee); Upgrade of High-Speed Electrification of the Northeast Corridor, Washington-New York, and the Design/Build for New Haven-Boston (NEC); and the Taiwan High-Speed Project Franchise (bidding).

John Harrison, Deputy Program Director (2009-Present)

Harrison directs the seven Regional Managers, bringing more than 40 years of intercity rail, rail transit, and HST project management experience. Projects include Northeast Corridor Improvement Project, HSR Commercial Feasibility Study for the Volpe National Transportation System Center, Amtrak Northend Electrification Design-Build, Pennsylvania HSR Study, California HSR Study, Taiwan HSR PE and Franchise Bidding.

The CHSTP Team

More than 400 persons are involved in the planning and engineering of the CHSTP, including more than 135 senior managers, planners, engineers, and operators with significant project work on one or more of the HST projects in Europe and Asia, as well as the Northeast Corridor. Examples of some of these projects and corresponding number of team members are shown below:

British HSR Projects: 21
 Chinese HSR Projects: 1
 Taiwan-Taipei-Kaohsiung: 23
 Korea-Seoul-Pusan: 7
 USA-North East Corridor: 65
 Boston-New Haven, Electrification: 4
 French TGV Projects: 2
 HSL Zuid-Belgium-Netherlands: 2
 Germany-ICE HSR: 2
 Denmark Storebaelt & Oresund Links: 3
 Portugal Linha do Norte: 2

Spanish HSR Projects: 3

Experts on this project have guided the planning, construction and/or operation of HST systems around the world representing hundreds of billions of dollars in infrastructure development. Resumes of key staff and project dates are available on request.

1B. Describe the organizational approach for the different Corridor Program stages included in this application (e.g., final design, construction), including the roles of staff, contractors and stakeholders in implementing the Corridor Program. For construction activities, provide relevant information on work forces, including railroad contractors and grantee contractors. Please limit response to 3,000 characters.

The California High-Speed Rail Authority (Authority)

The Authority is the state entity responsible for planning, constructing and operating a HST system. The Authority has a 9-member board and a core staff to implement the project which consists of an Executive Director, Deputy Directors, Chief Engineer, Project Management Oversight, Finance, Government Relations and a support staff that includes the Program Management Team (PMT).

The California Attorney General's office provides legal support on all matters including review of environmental deliverables including the Final Environmental Report (EIR) and the Notice of Determination (NOD) for the Authority. The CHSTP also directly involves the FRA who is the federal lead agency under NEPA responsible for technical and legal review of the regional project EISs. All environmental deliverables up to and including the Final EIS and Record of Decision (ROD) will be subject to FRA review and approval.

With voter approval of AB 3034 on November 4, 2008, the project now has \$9 billion in bond funding for the 800-mile statewide network and an additional \$950 million for capital improvements to commuter, intercity rail and local transit systems to connect existing infrastructure to the HST system.

The Management Team

The Authority has prepared the way for construction of the first HST operating on dedicated right-of-way in the U.S. The Authority has enlisted the skilled and qualified resources required to plan, construct and operate a HST infrastructure project by pulling together nearly 100 of the world's most notable engineering and planning firms to assist in:

- Program Management
- Project Engineering
- Economic Consulting
- Energy Consulting
- Environmental Services
- Infrastructure Design
- Systems, Operations and Ridership
- Right-of-Way and Land Use
- Specialty Engineering
- Transportation Planning
- Constructability Reviews
- Procurement
- Construction Management
- Testing and Commissioning
- Revenue Service Start-up

In 2006, the Authority contracted the services of a PMT, Parsons Brinckerhoff, to oversee and manage the CHSTP. This includes development of engineering design criteria and standards to guide the design, construction and operation of the project. The PMT provides complete program-level management and oversight of 8 regional consulting firms (RCs) who are performing the detailed planning, preparing the project-level environmental documents and performing the preliminary engineering. The RCs performing this work are as follows:

Phase 1:

SF-San Jose: HNTB

San Jose –Merced: Parsons Transportation Group
 Merced-Fresno: AECOM
 Fresno-Bakersfield: URS//Arup
 Bakersfield-Palmdale: URS/HMM/Arup
 Palmdale-LA: HMM/URS/Arup
 LA-Anaheim: STV

Phase 2:

LA-San Diego: HNTB
 Merced-Sacramento: AECOM

Regional managers from the PMT provide leadership for managing the project-level environmental process and PE work by the RCs and management of procurement, construction management, testing, commissioning and revenue start-up.

1C. Does any part of the Corridor Program require approval by FRA of a waiver petition from a Federal railroad safety regulation? (Reference to or discussion of potential waiver petitions will not affect FRA's handling or disposition of such waiver petitions).

- ☒ YES- If yes, explain and provide a timeline for obtaining the waivers
☐ NO

Please limit response to 1,500 characters.

The Authority is fully committed to safety assurance as the highest priority. Working in consultation with FRA, the Authority will help develop and then petition for approval of a Rule of Particular Applicability (RPA) governing compliance with all applicable FRA safety regulations. Application will also be made to CPUC for necessary waivers of CPUC General Orders.

The CHSTP design development process incorporates the EU Technical Specifications for developing HST systems as a set of subsystems, evaluating key interfaces, and optimizing the system for safety, reliability, and performance during the design process. CHSRA is working closely with FRA's Office of Safety to develop the basic framework for an RPA, building on the EU Technical Specifications and also incorporating other elements FRA believes should be addressed for the California HST system operation at speeds up to 220 mph.

Filing of a RPA is anticipated by 12/2010, with concurrent filing as necessary before CPUC. The Authority is working collaboratively with the FRA Office of Safety staff to progress all necessary discussions and technical foundation necessary to achieve this timetable.

1D. Provide a preliminary self-assessment of Corridor Program uncertainties and mitigation strategies (consider funding risk, schedule risk and stakeholder risk). Describe any areas in which the applicant could use technical assistance, best practices, advice or support from others, including FRA. Please limit response to 2,000 characters.

Funding: Funding is expected from federal, state, local, and private sources. State funds will provide \$9B in GO bond proceeds. Public private sector partnerships will be maximized. Federal funding is a critical component. To mitigate funding risk, a long-term dedicated funding source will be sought.

Schedule/Project Delivery (PD): PD risk management will focus on identifying, analyzing and mitigating hazards that may impact cost/schedule, e.g., engineering, construction, environmental, political or market hazards. One potential risk affecting overall PD schedule is the timely development of the Rule of Particular Applicability (RPA). The Authority will work closely with FRA to develop required information in support of the proposed RPA petition, expected to filed 12/2010.

Risk assessment methodologies to control costs/schedule will follow policies implemented by FTA and experience from other large infrastructure projects, subject to FRA guidelines. A risk register will allow tracking of all identified risks.

Stakeholder: Steps the Authority can take to limit the state's exposure to future construction cost increases include transferring this risk to a private partner through innovative contracting methods (DB or PPP) which have been effective at

delivering projects on-time and on-budget. The Authority will use traditional performance bonding and create incentives for contractors to fulfill contract obligations. Additionally, CHSRA will address potential jurisdiction of the Surface Transportation Board (STB) over any aspect(s) of the HST project and work to ensure timely completion all prospective regulatory oversight responsibilities consistent with the project delivery schedule.

The Authority's construction staging approach will provide independent utility sections that could function as operable segments prior to Phase 1 completion. This will further mitigate stakeholder risk.

(2) Stakeholder Agreements Narrative. *Additional information on Stakeholder Agreements is provided in Section 5.1.2.2 of the HSIPR Guidance.*

Under each of the following categories, describe the applicant's progress in developing requisite agreements with key stakeholders. In addition to describing the current status of any such agreements, address the applicant's experience in framing and implementing similar agreements, as well as the specific topics pertaining to each category.

2A. Ownership Agreements – Describe how agreements will be finalized with railroad infrastructure owners listed in the “Right-of-Way Ownership” and “Service Description” tables in Section B. If appropriate, “owner(s)” may also include operator(s) under trackage rights or lease agreements. Describe how the parties will agree on Corridor Program design and scope, benefits, implementation, use of Corridor Program property, maintenance, scheduling, dispatching and operating slots, Corridor Program ownership and disposition, statutory conditions and other essential topics. Summarize the status and substance of any ongoing or completed agreements. *Please limit response to 3,000 characters.*

The Authority has begun the process of working with owners of right-of-way where applicable. The process for ultimately negotiating right-of-way agreements will include contractual negotiations subject to FRA and State of California regulatory approval for safety. The Authority has assembled a team of both state and private entities to help coordinate this effort including the California State Department of General Services, regional consultants, and right-of-way acquisition experts. Throughout the majority of the system, the high-speed train system in California will run on dedicated track and will not require negotiations on scheduling, dispatching or operating slots. The one notable exception is in the Caltrain corridor. The Authority has already begun a collaborative relationship with Caltrain and is working towards developing an integrated body to provide service along that corridor. Most of the track will remain separate; however, the Authority has already signed a Memorandum of Understanding with the Peninsula Corridor Joint Powers Board (Caltrain).

The Authority is simultaneously working with stakeholders along the entire system. Initial outreach and Memorandum of Understanding (MOU) or Cooperative Agreements (CA) have been signed with Burlington Northern Santa Fe Corporation (BNSF), the Transbay Joint Powers Board (TJPA), the Alameda Corridor Express (ACE) and the Peninsula Corridor Joint Powers Board (Caltrain). MOUs with the Los Angeles County Metropolitan Transportation Authority (LACMTA) and the Caltrans Division of Rail are currently pending.

2B. Operating Agreements – Describe the status and contents of agreements with the intended operator(s) listed in “Services” table in the Application Overview section above. Address Corridor Program benefits, operation and financial conditions, statutory conditions, and other relevant topics. *Please limit response to 3,000 characters.*

The operator of the California High-Speed Train System will be obtained through an open, competitive bid process. The Authority will solicit qualified respondents who will be required to respond to a Request for Proposals (RFP) and to provide documented qualifications, past history and demonstrated experience with similar HST systems. In addition, the evaluation criteria will emphasize bidders' safety records. The Authority anticipates issuing an RFP for the system operator in 2010 with a limited scope. This will enable input to the design and procurement process which would be highly beneficial in the design and staging of the work. The later stages of the contract would include a detailed approach to their operations and would establish the necessary financial rewards to the Authority that would be expected from the operator as it anticipates that the operations and maintenance would be offered as a long-term franchise with suitable safeguards to the Authority.

The development of the draft agreement terms and conditions for the intended operator or operators will be developed as an integral part of the procurement process and will be issued as part of the solicitation.

Once an operator is selected, operating agreement(s) will be negotiated and executed between the owner of record (the Authority) and the contract operator. The operating agreements will emphasize a response to system safety, compliance with the United States Code of Federal Regulations (CFR-49 Sections 200 through 299) as applicable to high speed train operations (currently under development), forecasted ridership demand based service plans, and operating performance based requirements. It will include, but not be limited to:

-Levels of Service (total number of trains per peak hour, peak period, off peak period and per day);

- Frequency of Service (stations served, stopping patterns per hour during peak and off peak period);
- Travel Time Objectives (between city pairs);
- On Time Performance Targets (number of trains arriving at their final terminal stations on time as a percent of total trains operated);
- Service Quality Standards (e.g., cleanliness of interior and exterior of trains and stations, on board announcements, station announcements etc.);
- Operating and Safety Rules Qualification & Compliance; and
- Efficiency and Cost Effectiveness.

Service, operations and safety performance-based categories will be defined with quantified measureable objectives and there may be incentives for innovative approaches and for exceeding certain performance goals.

As explained above, it is intended that the operator franchise will submit a financial plan which will contribute to the building and/or operations of the line.

2C. Selection of Operator – If the proposed operator railroad was not selected competitively, please provide a justification for its selection, including why the selected operator is most qualified, taking into account cost and other quantitative and qualitative factors, and why the selection of the proposed operator will not needlessly increase the cost of the Corridor Program or of the operations that it enables or improves. *Please limit response to 3,000 characters.*

Not applicable.

2D. Other Stakeholder Agreements – Provide relevant information on other stakeholder agreements including State and local governments. *Please limit response to 3,000 characters.*

To complement high-speed train service in California, the Authority is pursuing partnerships with local and regional agencies and transit providers to propose mutually beneficial or joint use relationships. In addition to the Memorandum of Understanding (MOU) and Cooperative Agreements (CA) with owners of right of way-or-potential operating agreements, the Authority has worked proactively to engage every area that will benefit from high-speed rail service in the state. The following represents a list of local entities with whom the Authority has engaged in an MOU or CA:

- Council of Fresno County Governments and the Authority entered into a cooperative agreement to provide funding for the Authority to study possible rail consolidation and its impacts on the high-speed system. The Fresno County of Governments agreed to reimburse the Authority for the costs associated with the study in the corridor not to exceed \$250,000.
- Orange County Transportation Authority (OCTA) entered into MOU with the Authority in 2006 and updated the agreement recently with the intention of cooperating and sharing the results of environmental studies done on the corridor. In addition, the MOU represents a mutually beneficial relationship to improve and enhance current service to the LOSSAN Rail Corridor between Los Angeles and Anaheim. This agreement also includes a cost sharing provision with the OCTA providing funding for the Orange County portion of the LA-Anaheim Project-Level EIR/EIS totaling approximately \$7 million.
- City of Sacramento and the Authority signed an MOU to jointly study and work cooperatively to develop transportation solutions to meet the City's needs including an intermodal transportation facility.
- Transbay Joint Powers Authority and the Authority entered into an MOU to collaborate and create a working group to collaborate and share information on planning, design and environmental work progress.
- The Authority signed an MOU with the Southern California Association of Governments, San Diego Association of Governments, San Bernardino Associated Governments, Riverside County Transportation Commission and San Diego County Regional Airport Authority to share information on project level environmental studies and actively collaborate on developing high-speed rail in the area.

- In the Sacramento-Merced Corridor, the Authority has signed an MOU with the San Joaquin Regional Rail Commission to expand operation and planning/environmental studies to improve rail service in the Corridor.

In addition to stakeholder agreements from local governments, the Authority has signed MOUs with the relevant foreign governments including the following:

- Ministry of Land, Infrastructure and Transport of Japan
- German Ministry of Transport, Building and Housing
- Italian Ministry of Infrastructure and Transportation
- French Ministry for Ecology, Energy, Sustainable Development and Land Planning
- Spanish Ministry of Development

2E. Agreements with operators of other types of rail service - Are benefits to non-intercity passenger rail services (e.g., commuter, freight) foreseen? Describe any cost sharing agreements with operators of non-intercity passenger rail service (e.g., commuter, freight). *Please limit response to 3,000 characters.*

1. Caltrain commuter service, which is operated by the Peninsula Corridor Joint Powers Board (PCJPB), benefit from the investment of ARRA funds in the San Francisco to San Jose corridor. The PCJPB owns the Caltrain right-of-way that the Authority is planning to use for its HSR service. The Authority and PCJPB have negotiated a MOU to work together and develop a “single vision” for the corridor into the future. The MOU was approved by the Authority Board on March 5, 2009 and the PCJPB on April 2, 2009. It is anticipated that over time the MOU will be amended or replaced with a new agreement. Below are excerpts from the MOU:

The purpose of this agreement is to establish an initial organizational framework whereby CHSRA and PCJPB engage as partners in the planning, design, construction and funding of improvements in the Caltrain Rail Corridor that will accommodate and serve both the near-term and long-term needs of CHSRA intercity high speed rail service and PCJPB commuter rail rapid transit service.

2. An initial MOU with Burlington Northern for the LOSSAN corridor and Central Valley to exchange information has been signed. The Authority is currently working with Burlington Northern to establish a more detailed MOU dealing with the operations within their boundaries and the rules and regulations that are needed.

3. For the LOSSAN corridor, the Authority is currently working with the Orange County Transportation authority (OCTA) and the Los Angeles Metropolitan Transportation Authority (LAMTA) in Southern California to develop a MOU covering the operations of the Metrolink services in their area.

4. The Authority is similarly working with the California Division of Rail concerning operating rules and regulations as they are affected in the LOSSAN corridor and the Central Valley.

(3) Financial Information

3A. Capital Funding Sources. Please provide the following information about your funding sources (if applicable).

Non FRA Funding Sources	New or Existing Funding Source?	Status of Funding ⁴	Type of Funds	Dollar Amount (millions of \$ YOE)	% of Program Cost	Describe uploaded supporting documentation to help FRA verify funding source
State	New	Committed	State GO Bonds	\$388 total; \$194 State GO Bond	50%	Safe, Reliable High-Speed Passenger Train Bond Act for the 21st Century
	New	Committed				
	New	Committed				
	New	Committed				

3B. Capital Investment Financial Agreements. Describe any cost sharing contribution the applicant intends to make towards the Corridor Program, including its source, level of commitment, and agreement to cover cost increases or financial shortfalls. Describe the status and nature of any agreements between funding stakeholders that would provide for the applicant's proposed match, including the responsibilities and guarantees undertaken by the parties. Provide a brief description of any in-kind matches that are expected. *Please limit response to 3,000 characters.*

The total cost of this Phase I HSR Program-PE/NEPA/CEQA application is estimated to be \$388 million in Year of Expenditure Dollars (YOE) with 50% and \$194 million from ARRA grants. For this application, the Authority proposes the use of a 50% State funding match to proposed ARRA grants. State matching funds will be provided through general obligation bond proceeds from the passage of the High-Speed Rail Bond Act. In November 2008, California voters passed the Safe, Reliable High-Speed Passenger Train Bond Act for the 21st Century which approved the issuance of general obligation bonds totaling \$9 billion primarily for capital costs associated with the development of high-speed rail in California. In each of the Authority's grant applications, the Authority is prepared to use GO bond proceeds to match these environmental studies as the statutory limit for environmental studies, planning and preliminary engineering is 10% or (\$900 million).

3C. Corridor Program Sustainability and Operating Financial Plan.

Please report on the Applicant's projections of future financial requirements to sustain the service by completing the table below (in YOE dollars) and answering the following question. Describe the source, nature, share, and likelihood of each identified funding source that will enable the State to satisfy its projected financial support requirements to sustain the operation of the service addressed in this Corridor Program. *Please limit response to 2,000 characters.*

This application focuses on Track 1 funds to complete the NEPA/CEQA process. It does not, however, result in immediate operations. Based on the Ridership and Revenue study presented in the Authority's 2008 Business Plan, ridership and revenue for the full system is expected to generate \$1.2 billion (2008\$) in operations, maintenance or renewal and replacement are not expected to be necessary. The first full year of operations is assumed at 2020 including only Phase I of the system. According to the Benefit-Cost Analysis conducted for the Authority (and presented in the 2008 Business Plan), Phase II will begin operations in 2026 and full system revenue surplus is positive from the start of revenue service in 2020. Renewal and replacement reserves were estimated assuming a useful life for each category of assets identified in the Authority's 2008 Business Plan. For those cost items deemed to be "one time" costs, such as program implementation, tunnels and buildings, no future replacement need was assumed. For replacement costs, the team determined the replacement

⁴ **Reference Notes:** The following categories and definitions are applied to funding sources:

Committed: Committed sources are programmed capital funds that have all the necessary approvals (e.g. legislative referendum) to be used to fund the proposed phase without any additional action. These capital funds have been formally programmed in the State Rail Plan and/or any related local, regional, or State Capital Investment Program CIP or appropriation. Examples include dedicated or approved tax revenues, State capital grants that have been approved by all required legislative bodies, cash reserves that have been dedicated to the proposed phase, and additional debt capacity that requires no further approvals and has been dedicated by the sponsoring agency to the proposed phase.

Budgeted: This category is for funds that have been budgeted and/or programmed for use on the proposed phase but remain uncommitted, i.e., the funds have not yet received statutory approval. Examples include debt financing in an agency-adopted CIP that has yet to be committed in their near future. Funds will be classified as budgeted where available funding cannot be committed until the grant is executed, or due to the local practices outside of the phase sponsor's control (e.g., the phase development schedule extends beyond the State Rail Program period).

Planned: This category is for funds that are identified and have a reasonable chance of being committed, but are neither committed nor budgeted. Examples include proposed sources that require a scheduled referendum, requests for State/local capital grants, and proposed debt financing that has not yet been adopted in the agency's CIP.

need in year of expenditure dollars for each category. For each major capital cost component, we began by determining the year 2 contribution amount to a reserve account (increasing at a 7% escalation after the base year) necessary to allow enough funds to accumulate in time to replace the asset, assuming an annual interest rate of 3.5%.

To further confirm the ridership estimates, the Authority is planning to conduct an investment grade ridership and revenue study. These ridership and revenue estimates are not inconsistent with international high-speed rail examples in Europe and Asia.

Note: Please enter supporting projections in the Track 2 Application Supporting Forms, and submit related funding agreements or other documents with the Supporting Materials described in Part G of this Track 2 Application. The numbers entered in this table must agree with analogous numbers in the Supporting Forms.

Funding Requirement (as identified on the Supporting Form)	Baseline Actual-FY 2009 Levels (State operating subsidy for FY 2009 if existing service)	Projected Totals by Year (\$ Millions Year Of Expenditure (YOE)* Dollars - One Decimal)		
		First full year of operation	Fifth full year of operation	Tenth full year of operation
Indicate the Fiscal Year	2009	2020	2025	2030
Surplus/deficit after capital asset renewal charge ⁵	n/a	\$345.0	\$1,262.0	\$3,603.0
Total Non-FRA sources of funds applicable to the surplus/deficit after capital asset renewal	n/a	n/a	n/a	n/a
Funding Requirements for which Available Funds Are Not Identified	n/a	n/a	n/a	n/a

* Year-of-Expenditure (YOE) dollars are inflated from the base year. Applicants should include their proposed inflation assumptions (and methodology, if applicable) in the supporting documentation.

Note: Data reported in this section should be consistent with the information provided in the Operating and Financial Performance supporting form for this application.

⁵ The “capital asset renewal charge” is an annualized provision for **future** asset replacement, refurbishment, and expansion. It is the annualized equivalent to the “continuing investments” defined in the FRA’s Commercial Feasibility Study of high-speed ground transportation (*High-Speed Ground Transportation for America*, September 1997, available at <http://www.fra.dot.gov/us/content/515> (see pages 5-6 and 5-7).

- (4) Financial Management Capacity and Capability** – Provide audit results and/or other evidence to describe applicant capability to absorb potential cost overruns, financial shortfalls identified in 3C, or financial responsibility for potential disposition requirements (include as supporting documentation as needed). Provide statutory references/ legal authority to build and oversee a rail capital investment. *Please limit response to 3,000 characters.*

The California High-Speed Rail Authority (the Authority) is a state entity and has been given the responsibility to develop a high-speed train system (HST) in the State of California pursuant to Chapter 796 of the Statutes of 1996 (Senate Bill 1420, Kopp and Costa) (see Authorizing Statue Section F). The Authority is tasked to prepare a plan and design for the HST system, conduct environmental studies and obtain necessary permits, and undertake the construction and operation of a high-speed train passenger network in California. As part of its mission and role within the State government, the Authority goes through a normal annual budget process consistent with other state transportation agencies. In addition to general fund appropriations, the California voters passed Proposition 1A, the Safe, Reliable High-Speed Passenger Train Bond Act on November 4, 2008 which allows for the issuance of \$9 billion in general obligation bonds be issued to establish a clean, efficient high-speed train service linking Southern California, the Sacramento San Joaquin Valley, and the San Francisco Bay Area. Proposition 1A bond act allocations are subject to annual budget authorizations. The following table represents the Authority's budget history from 2005. The Authority's ability to absorb potential cost overruns in design and construction have already been addressed in the previous section as the Authority will use design-build and other procurement techniques to minimize public sector risk. In addition, the full operating system is not expected to require additional operating subsidy as the ridership and revenue estimates indicate an annual surplus even when adjusting for renewal and replacement.

FY	Total
1997/98	\$1,500,000
1998/99	\$3,000,000
1999/00	\$3,032,000
2000/01	\$6,026,000
2001/02	\$4,038,000
2002/03	\$7,928,000
2003/04	\$3,802,000
2004/05	\$1,151,000
2005/06	\$3,646,000
2006/07	\$14,553,000
2007/08	\$20,694,000
2008/09	\$44,231,000
2009/10	\$139,180,000
Total	\$252,781,000

- (5) Timeliness of Corridor Program Completion** – Provide the following information on the dates and duration of key activities, if applicable. For more information, see Section 5.1.3.1 of the HSIPR Guidance, Timeliness of Corridor Program Completion.

Final Design Duration:	NA to this application
Construction Duration:	NA to this application
Rolling Stock Acquisition/Refurbishment Duration:	NA to this application
Service Operations Start date:	NA to this application

- (6) If applicable, describe how the Corridor Program will promote domestic manufacturing, supply and industrial development, including furthering United States-based equipment manufacturing and supply industries. Please limit response to 1,500 characters.**

This project will be funded utilizing Federal HSIPR funds and therefore Buy America Requirements will be complied with. The following excerpts from 49CFR661 illustrate the applicability of compliance and the associated regulations that will promote domestic manufacturing and supply and support other US based industries.

§ 661.1 Applicability.

Unless otherwise noted, this part applies to all federally assisted procurements using funds authorized by 49 U.S.C. 5323(j); 23 U.S.C. 103(e)(4); and section 14 of the National Capital Transportation Act of 1969, as amended.

§ 661.5 General requirements.

(a) Except as provided in §661.7 and §661.11 of this part, no funds may be obligated by FTA for a grantee project unless all iron, steel, and manufactured products used in the project are produced in the United States.

- (7) If applicable, describe how the Corridor Program will help develop United States professional railroad engineering, operating, planning and management capacity needed for sustainable IPR development in the United States. Please limit response to 1,500 characters.**

The HSIPR program will serve as a catalyst to revitalize intercity passenger rail service throughout the U.S. and to develop new high-speed train service. To be successful in this initiative, the U.S. must have viable sources of supply and manufacturing expertise. In addition, the U.S. must also develop and sustain professional high-speed rail planning, engineering, operating and management expertise charged with developing designs and providing oversight of manufacturing, testing and commissioning programs that will provide the cornerstones of a safe, reliable and sustainable HSIPR program.

This project will require specialized expertise providing oversight that specification compliant designs and products are being delivered on schedule and within budget. This requirement for specialized expertise will contribute to the development of U.S.-based specialists with the critical skill sets necessary to advance the national expertise necessary to advance HSIPR throughout the nation.

This program will serve as a catalyst to develop new engineering professionals in this field. The State of California already possesses a diverse work force and an ample university system which will help provide the technical and managerial work force to support the development of high-speed and intercity passenger rail expertise over the next several decades.

Corridor Program Name: CA-PHASE1HSRPROGRAM-PE/NEPA/CEQA Date of Submission: 10/01/09 Version Number: 1

F. Additional Information

(1) Please provide any additional information, comments, or clarifications and indicate the section and question number that you are addressing (e.g., Section E, Question 1B). This section is optional.

Section B, Question 6: The CA-PHASE 1HSRPROGRAM-PE/NEPA/CEQA Corridor Program includes seven PE/NEPA/CEQA Corridor Projects, covering the seven geographic sections that comprise the 520-mile Phase 1 California HST system for which project-level EIS/EIR documents are all currently underway: SF-San Jose, San Jose-Merced, Merced-Fresno, Fresno-Bakersfield, Bakersfield-Palmdale, Palmdale-LA, and LA-Anaheim.

Below is a brief summary of all railroad right-of-way owners in the Phase 1 HSR Corridor Program area by geographic section from north to south:

- From SF-San Jose Caltrain/JPB owns the entire ROW in this Commuter Rail and Freight corridor from the SF 4th & King Street Station to San Jose Diridon Station. UPRR owns Track 1 in the southern 5 miles from CP Coast to CP Lick. The Authority has a signed MOU with Caltrans/JPB for this corridor. From San Jose-Merced, the UPRR owns from CP Lick to CP Carnadero, a distance of 29.7 miles. No agreement is currently in place, but UPRR is aware of the Authority's plans. (The Authority is currently evaluating alternative HST alignments that would avoid any impacts to the UPRR operations between San Jose and Gilroy.) The Santa Clara Valley Transportation Authority (VTA) owns the Gilroy Station and storage tracks. There is also a Class III Freight Railroad (Shortline), the California Northern Railroad owned by UPRR, with trackage in the area of the planned HST alignment, but there should be no impact to their service.
- From Merced-Fresno, a distance of approximately 60 miles, two Class 1 railroads own and operate trackage within their own rights of way. The Authority is evaluating alternative alignments in this corridor that would run adjacent to, but not within the UPRR mainline.
- From Fresno-Bakersfield, a distance of approximately 113 miles, two Class 1 railroads own and operate trackage within their own rights of way, The Authority is evaluating alternative alignments in this area, some of which would involve relocation of the BNSF trackage within its existing 100-ft ROW (to one side) to allow possible sharing of a portion of the ROW width with HST. Additional adjacent ROW of up to 100 feet or more would need to be acquired to accommodate both freight and HST within a shared ROW without a crash barrier. The Authority is in discussions with BNSF to pursue this option in the 98-mile rural section between Bowles (just south of Fresno) and Rosedale (just north of Bakersfield) and will consult with the FRA on the safety aspects of this proposal.
- From Bakersfield-Palmdale, a distance of approximately 84 miles (on the HST route or over 100 miles on the UPRR route), UPRR owns and operates the mainline; BNSF has trackage rights. The Los Angeles County Metropolitan Transportation Authority (LACMTA) also owns a portion of the ROW from Lancaster to Palmdale, a distance of 9.1 miles operated by Metrolink. The CHSRA is evaluating alternative HST alignments generally following the UPRR route (but not within their ROW) south of Bakersfield and in the Antelope Valley through Lancaster into Palmdale. (Through the Tehachapi Mountains the HST route will be on a completely independent alignment involving extensive tunneling.)
- From Palmdale-Los Angeles, the UPRR owns the existing railroad ROW from Palmdale to Sylmar and LACMTA owns the ROW from Sylmar to LA Union Station. From Palmdale to Sylmar, a distance of approximately 40 miles on the HST alignment, the route will be on its own independent alignment not following the existing UPRR route. From Sylmar to LAUS, a distance of approximately 22 miles, the Authority is evaluating a number of alternative HST alignments, some of which would share ROW and/or run parallel to the LACMTA route, which is operated by Metrolink. A MOU has been negotiated and is pending between the Authority and the MTA covering this route.
- From LA-Anaheim, a distance of 30.1 miles apart, the Authority is evaluating a number of alternative alignments generally within the existing LOSSAN corridor. The LACMTA owns approximately 5 miles of the ROW, BNSF owns approximately 21 miles, and the Orange County Transportation Authority (OCTA) owns the southernmost 7 miles from Fullerton Jct. to Anaheim Station (future ARTIC site). The CHSRA has negotiated a MOU with LACMTA for their

portion of the route; the Authority is currently negotiating an Agreement with BNSF and is also in discussions with OCTA.

Section B, Question 7 (Services): As described in the above Section B, Question 6, the CA-PHASE I HSR PROGRAM-PE/NEPA/CEQA Corridor Program includes seven PE/NEPA/CEQA Corridor Projects, covering the seven geographic sections that comprise the 520-mile Phase 1 California HST system for which project-level EIS/EIR documents are all currently underway: SF-San Jose, San Jose-Merced, Merced-Fresno, Fresno-Bakersfield, Bakersfield-Palmdale, Palmdale-LA, and LA-Anaheim.

Following is a brief summary of all existing rail services within the Corridor boundaries (freight, commuter and intercity passenger) in the Phase 1 HSR Corridor Program area by geographic section from north to south:

- From SF-San Jose Diridon, Caltrain/JPB operates 90 one-way trains per day at up to 79 mph over this 50-mile route. Between CP Coast and CP Lick (a distance of 5 miles straddling San Jose Diridon Station), UPRR operates 20 daily freights at up to 50 mph top speed, ACE operates 8 commuter trains per day at up to 79 mph, and Amtrak operates 15 Capitol Corridor and 2 Coast Starlight trains per day at up to 79 mph. From San Jose-Merced, the UPRR, Caltrain, and Amtrak (Coast Starlight) all operate on the UP Mainline between San Jose and Gilroy. The top speed for freight is 60 mph and for passenger is 79 mph. In addition ACE operates non-revenue mid-day storage trains between San Jose Diridon station and a yard 2 miles south of the station. The Authority's proposed HST alignments currently being evaluated in this area would not involve any direct impacts to these existing services.
 - From Merced-Fresno, UPRR operates 24 daily through freight trains at a top speed of 70 mph on this 60-mile section. Amtrak operates 12 daily San Joaquins on the adjacent BNSF line at up to 79 mph. The BNSF operates 33 through freights daily on their own mainline at top speeds of 65 mph. The Authority's proposed HST alignments currently being evaluated in this area would not involve any direct impacts to these existing services.
 - From Fresno-Bakersfield, BNSF operates 22 daily through freights at top speeds of up to 70 mph and Amtrak operates 12 San Joaquins at up to 79 mph. Construction staging within this corridor would be coordinated with BNSF and Amtrak train operations to minimize service delay or disruption.
 - Between Bakersfield-Palmdale, UPRR operates 10 through freights and BNSF operates 20 through freights (under a trackage-rights agreement) at top speeds of up to 60-70 mph on the UPRR route. (There is no proposal to share ROW in this section.)
- From Palmdale-LA, UPRR operates 10 daily through freights at up to 50 mph in the first 32.6-mile portion of this route. (There are no plans to share ROW in this area.) In the 32-mile section from Sylmar to just north of LAUS, UPRR operates 10 through freights daily at top speeds of 50 mph, and Metrolink operates 44 daily commuter trains (24 beyond MP 10.8) and Amtrak operates 14 daily trains (from MP 10.8 to LAUS) at a top speed of 60 mph. Construction staging within this corridor would be coordinated with Metrolink, UPRR and Amtrak to minimize service delay or disruption.
- In the LA-Anaheim LOSSAN Corridor, BNSF operates between 40-60 daily freights at a top speed of 50 mph, UPRR operates 2 freights (only between Anaheim and Costa Mesa), Metrolink operates 28 commuter trains between LA and Fullerton and 19 between Fullerton and Anaheim, and Amtrak operates 22 daily intercity (Surfliner) trains (24 on weekends) and 2 LA-Chicago Southwest Chief trains from LAUS to Fullerton Jct. The passenger trains all currently have a top speed limit of 79 mph. Construction staging within this corridor would be coordinated with Metrolink, BNSF, UPRR, and Amtrak to minimize service delay or disruption. This concludes our discussion of existing rail services in the Phase 1 HST route from San Francisco to Anaheim.

Section E, Question 4
 Authorizing Statute for Authority
 California Public Utilities Code
 SECTION 185000-185012

185000. This division shall be known, and may be cited, as the California High-Speed Rail Act.

185010. The Legislature hereby finds and declares all of the following:

- (a) California, over the past decades, has built an extensive network of freeways and airports to meet the state's growing transportation needs.
- (b) These facilities are not adequate to meet the mobility needs of the current population.
- (c) The population of the state and the travel demands of its citizens are expected to continue to grow at a rapid rate.
- (d) The cost of expanding the current network of highways and airports fully to meet current and future transportation needs is prohibitive, and a total expansion strategy would be detrimental to air quality.
- (e) Intercity rail service, when coordinated with urban transit and airports, is an efficient, practical, and less polluting transportation mode that can fill the gap between future demand and present capacity.
- (f) Advances in rail technology have allowed intercity rail systems in Europe and Japan to attain speeds of up to 200 miles per hour and compete effectively with air travel for trips in the 200 to 500-mile range.
- (g) Development of a high-speed rail system is a necessary and viable alternative to automobile and air travel in the state.
- (h) In order for the state to have a comprehensive network of high-speed intercity rail systems by the year 2020, it must begin preparation of a high-speed intercity rail plan similar to California's former freeway plan and designate an entity with stable and predictable funding sources to implement the plan.
- (i) Utilizing existing human and manufacturing resources to build a large network of high-speed rail systems will generate jobs and economic growth for today's population and produce a transportation network for future generations.
- (j) Upon confirmation of the need and costs by detailed studies, the private sector, together with the state, can build and operate new high-speed intercity rail systems utilizing private and public financing.
- (k) The existing high-speed rail commission is completing its work and a successor authority to continue planning is necessary.

185012. As used in this division, unless the context requires otherwise, the following terms have the following meanings:

- (a) "Authority" means the High-Speed Rail Authority.
- (b) "Department" means the Department of Transportation.
- (c) "High-speed rail" means intercity passenger rail service that utilizes an alignment and technology that makes it capable of sustained speeds of 200 miles per hour or greater.

CALIFORNIA CODES
PUBLIC UTILITIES CODE
SECTION 185020-185024

185020. (a) There is in state government a High-Speed Rail Authority.

(b) (1) The authority is composed of nine members as follows:

- (A) Five members appointed by the Governor.
- (B) Two members appointed by the Senate Committee on Rules.
- (C) Two members appointed by the Speaker of the Assembly.

(2) For the purposes of making appointments to the authority, the

Governor, the Senate Committee on Rules, and the Speaker of the Assembly shall take into consideration geographical diversity to ensure that all regions of the state are adequately represented.

(c) Except as provided in subdivision (d), and until their successors are appointed, members of the authority shall hold office for terms of four years. A vacancy shall be filled by the appointing power making the original appointment, by appointing a member to serve the remainder of the term.

(d) (1) On and after January 1, 2001, the terms of all persons who are then members of the authority shall expire, but those members may continue to serve until they are reappointed or until their successors are appointed. In order to provide for evenly staggered terms, persons appointed or reappointed to the authority after January 1, 2001, shall be appointed to initial terms to expire as follows:

(A) Of the five persons appointed by the Governor, one shall be appointed to a term which expires on December 31, 2002, one shall be appointed to a term which expires on December 31, 2003, one shall be appointed to a term which expires on December 31, 2004, and two shall be appointed to terms which expires on December 31, 2005.

(B) Of the two persons appointed by the Senate Committee on Rules, one shall be appointed to a term which expires on December 31, 2002, and one shall be appointed to a term which expires on December 31, 2004.

(C) Of the two persons appointed by the Speaker of the Assembly, one shall be appointed to a term which expires on December 31, 2003, and one shall be appointed to a term which expires on December 31, 2005.

(2) Following expiration of each of the initial terms provided for in this subdivision, the term shall expire every four years thereafter on December 31.

(e) Members of the authority are subject to the Political Reform Act of 1974 (Title 9 (commencing with Section 81000)).

- (f) From among its members, the authority shall elect a chairperson, who shall preside at all meetings of the authority, and a vice chairperson to preside in the absence of the chairperson. The chairperson shall serve a term of one year.
- (g) Five members of the authority constitute a quorum for taking any action by the authority.

185022. (a) Each member of the authority shall receive compensation of one hundred dollars (\$100) for each day that the member is attending to the business of the authority, but shall not receive more than five hundred dollars (\$500) in any calendar month.
- (b) Members of the authority shall be reimbursed for their actual travel expenses incurred in attending to the business of the authority.
185024. (a) The authority shall appoint an executive director, who shall serve at the pleasure of the authority, to administer the affairs of the authority as directed by the authority.
- (b) The executive director is exempt from civil service and shall be paid a salary established by the authority and approved by the Department of Personnel Administration.
- (c) The executive director may, as authorized by the authority, appoint necessary staff to carry out the provisions of this part.

CALIFORNIA CODES
PUBLIC UTILITIES CODE
SECTION 185030-185038

185030. The authority shall direct the development and implementation of intercity high-speed rail service that is fully integrated with the state's existing intercity rail and bus network, consisting of interlinked conventional and high-speed rail lines and associated feeder buses. The intercity network in turn shall be fully coordinated and connected with commuter rail lines and urban rail transit lines developed by local agencies, as well as other transit services, through the use of common station facilities whenever possible.

185032. (a) (1) Upon an appropriation in the Budget Act for that purpose, the authority shall prepare a plan for the construction and operation of a high-speed train network for the state, consistent with and continuing the work of the Intercity High-Speed Rail

Commission conducted prior to January 1, 1997. The plan shall include an appropriate network of conventional intercity passenger rail service and shall be coordinated with existing and planned commuter and urban rail systems.

- (2) The authorization and responsibility for planning, construction, and operation of high-speed passenger train service at speeds exceeding 125 miles per hour in this state is exclusively granted to the authority.
- (3) Except as provided in paragraph (2), nothing in this subdivision precludes other local, regional, or state agencies from exercising powers provided by law with regard to planning or operating, or both, passenger rail service.
- (b) The plan, upon completion, shall be submitted to the Legislature and the Governor for approval by the enactment of a statute.

185034. The authority may do any of the following:

- (1) Conduct engineering and other studies related to the selection and acquisition of rights-of-way and the selection of a franchisee, including, but not limited to, environmental impact studies, socioeconomic impact studies, and financial feasibility studies.
- (2) Evaluate alternative high-speed rail technologies, systems and operators, and select an appropriate high-speed rail system.
- (3) Establish criteria for the award of a franchise.
- (4) Accept grants, fees, and allocations from the state, from political subdivisions of the state or from the federal government, foreign governments, and private sources.
- (5) Select a proposed franchisee, a proposed route, and proposed terminal sites.
- (6) Enter into contracts with public and private entities for the preparation of the plan.
- (7) Prepare a detailed financing plan, including any necessary taxes, fees, or bonds to pay for the construction of the high-speed train network.
- (8) Develop a proposed high-speed rail financial plan, including necessary taxes, bonds, or both, or other indebtedness, and submit the plan to the Legislature and to the Governor.
- (9) Keep the public informed of its activities.

185036. Upon approval by the Legislature, by the enactment of a statute, or approval by the voters of a financial plan

providing the necessary funding for the construction of a high-speed network, the authority may do any of the following:

- (a) Enter into contracts with private or public entities for the design, construction and operation of high-speed trains. The contracts may be separated into individual tasks or segments or may include all tasks and segments, including a design-build or design-build-operate contract.
- (b) Acquire rights-of-way through purchase or eminent domain.
- (c) Issue debt, secured by pledges of state funds, federal grants, or project revenues. The pledge of state funds shall be limited to those funds expressly authorized by statute or voter-approved initiatives.
- (d) Enter into cooperative or joint development agreements with local governments or private entities.
- (e) Set fares and schedules.
- (f) Relocate highways and utilities.

185038. Any legal or equitable action brought against the authority shall be brought in a court of competent jurisdiction in the County of Sacramento. For purposes of this section, subdivision (1) of Section 401 of the Code of Civil Procedure does not apply.

Corridor Program Name: CA-PHASE1HSRPROGRAM-PE/NEPA/CEQA Date of Submission: 10/01/09 Version Number: 1

G.Summary of Application Materials

Note: In addition to the requirements listed below, applicants must comply with all requirements set forth in the HSIPR Guidance and all applicable Federal laws and regulations, including the American Recovery and Reinvestment Act of 2009 (ARRA) and the Passenger Rail Investment and Improvement Act of 2008 (PRIIA).

Application Forms	Required for Corridor Programs	Required for Projects [See Note Below]	Reference	Comments
<input checked="" type="checkbox"/> This Application Form	✓		HSIPR Guidance Section 4.3.3.3	
<input checked="" type="checkbox"/> Corridor Service Overview (Same Corridor Service Overview may be used for multiple applications)	✓		HSIPR Guidance Section 4.3.3.3	
Supporting Forms (Forms are provided by FRA on Grant Solutions and the FRA website)	Required for Corridor Programs	Required for Projects [See Note Below]	Reference	Comments
<input checked="" type="checkbox"/> General Info	✓	✓	HSIPR Guidance Section 4.3.5	FRA Excel Form
<input checked="" type="checkbox"/> Detailed Capital Cost Budget	✓	✓	HSIPR Guidance Section 4.3.5	FRA Excel Form
<input checked="" type="checkbox"/> Annual Capital Cost Budget	✓	✓	HSIPR Guidance Section 4.3.5	FRA Excel Form
<input checked="" type="checkbox"/> Operating and Financial Performance and Any Related Financial Forms	✓		HSIPR Guidance Section 5.3.5	FRA Excel Form

<input checked="" type="checkbox"/> Program or Project Schedule	✓	✓	HSIPR Guidance Section 4.3.5	FRA Excel Form
Supporting Documents <i>(Documents to be generated and provided by the applicant)</i>	Required for Corridor Programs	Required for Projects [See Note Below]	Reference	Comments
<input checked="" type="checkbox"/> Map of Corridor Service	✓		Corridor Service Overview Question B.2	
<input checked="" type="checkbox"/> Service Development Plan	✓		HSIPR Guidance Section 1.6.2	
<input checked="" type="checkbox"/> “Service” NEPA	✓		HSIPR Guidance Section 1.6.2	
<input checked="" type="checkbox"/> Project Management Plan	✓		HSIPR Guidance Section 4.3.3.2	
<input type="checkbox"/> “Project” NEPA (Required before obligation of funds)		✓	HSIPR Guidance Section 1.6.2	
<input checked="" type="checkbox"/> PE Materials	✓	✓	HSIPR Guidance Section 1.6.2	
<input checked="" type="checkbox"/> Stakeholder Agreements	✓	✓	HSIPR Guidance Section 4.3.3.2	
<input checked="" type="checkbox"/> Financial Plan	✓	✓	HSIPR Guidance Section 4.3.3.2	
<input checked="" type="checkbox"/> Job Creation	✓	✓	HSIPR Guidance Section 1.6.2	

Standard Forms (Can be found on the FRA website and www.forms.gov)	Required for Corridor Programs	Required for Projects [See Note Below]	Reference	Comments
<input checked="" type="checkbox"/> SF 424: Application for Federal Assistance	✓		HSIPR Guidance Section 4.3.3.3	Form
<input checked="" type="checkbox"/> SF 424C: Budget Information-Construction	✓		HSIPR Guidance Section 4.3.3.3	Form
<input checked="" type="checkbox"/> SF 424D: Assurances-Construction	✓		HSIPR Guidance Section 4.3.3.3	Form
<input checked="" type="checkbox"/> FRA Assurances Document	✓		HSIPR Guidance Section 4.3.3.3	Form
Note: Items checked under “Corridor Programs” are required at the time of submission of this Track 2 Corridor Programs application. Items checked under “Projects” are optional at the time of submission of this Track 2 Corridor Programs application, but required prior to FD/Construction grant award.				

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